

What is claimed is

- 5        1. A roller comprising a roller core and a roller covering being composed  
of an elastomer or elastic plastic material containing fluorinated  
polyolefin.
- 10      2. The roller of claim 1, wherein said fluorinated polyolefin is selected  
from fluorocarbon plastics.
- 15      3. The roller of claim 1, wherein said fluorinated polyolefin essentially  
comprises polytetrafluoroethylene or fluorinated ethylene propylene  
copolymer.
- 20      4. The roller of claim 1, wherein said elastomer or elastic plastic material  
comprises from 0.5 to 25 % by weight of said fluorinated polyolefin.
- 25      5. The roller of claim 1, wherein said fluorinated polyolefin is applied as  
powder or fiber, or in the form of a fibrous material.
- 30      6. The roller of claim 1, wherein said roller covering comprises one or  
more concentric layers and wherein said fluorinated polyolefin  
containing elastomer or elastic plastic material forms a surface layer of  
said concentric layers.
- 35      7. The roller of claim 1, wherein said elastomer or elastic plastic material  
is based on natural or synthetic rubber, at least one elastic  
thermoplastic, at least one thermoplastic elastomer, a castable  
polyurethane system, or a suitable mixture thereof.
- 40      8. The roller of claim 7, wherein said synthetic rubber is selected from  
acrylonitrile butadiene rubber, ethylene rubber, ethylene-propylene  
rubber, styrene butadiene rubber, butyl rubber, polyurethane rubber,  
polyacrylic rubber, epichlorohydrine rubber, silicone rubber,  
chloroprene rubber, or a suitable mixture thereof.
- 45      9. The roller of claim 7, wherein said elastomer or elastic plastic material  
is based on acrylonitrile butadiene rubber, chloroprene rubber,  
polyurethane rubber, polyvinyl chloride, or a suitable mixture thereof.
- 50      10. The roller of claim 7, wherein said thermoplastic elastomer comprises  
elastified polyolefin, styrene block copolymer, copolyester  
elastomer, thermoplastic polyurethane, or a suitable mixture thereof.

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11. The roller of claim 7, wherein said castable polyurethane system comprises a two-component or multi-component polyurethane system.
12. A method of using the roller of claim 1 comprising the step of running the roller in a dampening system of an offset printing machine.
- 5 13. A method of making the roller of claim 1 comprising the steps of admixing fluorinated polyolefin to a rubber compound, to at least one elastic thermoplastic, to at least one thermoplastic elastomer, or to at least one component of a suitable mixture thereof to form a coating material,
- 10 or to a liquid mixture of a two-component or multiple-component castable polyurethane system to form a coating composition, and applying said coating material or coating composition to a roller core.
14. The method of claim 13, wherein said coating material or coating composition is applied to form a surface layer of a roller covering to said roller core.
- 15 15. A method of making the roller of claim 1 comprising the steps of impregnating or coating a fibrous material being composed of fluorinated polyolefin with natural or synthetic rubber, at least one elastic thermoplastic, at least one thermoplastic elastomer (TPE), a castable polyurethane system, or a suitable mixture thereof, and covering a roller core or roller with said impregnated or coated fibrous material.
- 20 16. A method of improving the ink-repellent properties of a roller covering being composed of an elastomer or elastic plastic material comprising the step of incorporating fluorinated polyolefin into said elastomer or elastic plastic material.
- 25 17. The method of claim 16, wherein said fluorinated polyolefin is selected from fluorocarbon plastics.
- 30 18. The method of claim 16, wherein said fluorinated polyolefin is applied as powder, fiber or fibrous material.

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